

REMARKS

The examiner of the above-referenced patent application issued a restriction requirement and set forth objections to several of the pending claims. Applicants have addressed above the claim objections to the extent that they are relevant relative to the claims selected for initial prosecution in view of the examiner's classification of the claims in the Restriction Requirement. Specifically, the examiner asserted that the claims are drawn to the following distinct inventions:

Group I: claims 1-4, 9-14 and 21-24, only in so far as they are drawn to an isolated polynucleotide comprising exon 1d (SEQ ID NO:1), classified in class 435, subclass 69.1;

Group II: drawn to claims 5-14 and 21-24, only in so far as they are drawn to an isolated polynucleotide comprising exon 1f (SEQ ID NO:5), classified in class 435, subclass 69.1;

Group III: claims 5-14 and 21-24, only in so far as they are drawn to an isolated polynucleotide comprising exon 1e (SEQ ID NO:6), classified in class 435, subclass 69.1;

Group IV: claim 15, drawn to a human protein, classified in class 530, subclass 350;

Group V: claim 16, drawn to an antibody, classified in class 530, subclass 388,22;

Class VI: claim 17, drawn to a transgenic animal, classified in class 800, subclass 2;

Class VII: claims 19 and 20, only in so far as they are drawn to a polynucleotide which is complementary to a portion of a polynucleotide comprising exon 1d (SEQ ID NO:1); classified in class 536, subclass 24.31;

Class VIII: claims 19 and 20, only in so far as they are drawn to a polynucleotide which is complementary to a portion of

a polynucleotide comprising exon 1f (SEQ ID NO:5); classified in class 536, subclass 24.31; and

Class IX: claims 19 and 20, only in so far as they are drawn to a polynucleotide which is complementary to a portion of a polynucleotide comprising exon 1e (SEQ ID NO:5); classified in class 536, subclass 24.31.

Applicants hereby elect the claims of Group I with traverse. The examiner asserted that there was a lack of unity between the claims of the different groups because the claims were directed to compositions which "lack a common utility which is based upon a common structural feature lacking from the prior art."

Applicants respectfully request that the examiner reconsider his decision to classify the subject matter of claims 1-4, 9-14 and 21-24 into one group and claim 17 into a different group. Claim 1 is directed to an isolated polynucleotide molecule, and claim 10 is directed to a host cell transformed with that molecule. Claim 17 is directed to an animal transformed with that molecule. Contrary to the examiner's assertion, these three claims do have "a common structural feature lacking from the prior art"--the polynucleotide comprising exon 1d of the human Vitamin D receptor gene. Applicants respectfully submit that a transgenic animal comprising a polynucleotide should not be distinguished from a host cell containing that same polynucleotide. Accordingly, Applicant request that the claims of Group I and the claim of Group VI be considered together.

Applicants also respectfully request that the examiner reconsider his decision to classify the subject matter of claims 1-4, 9-14 and 21-24 into one group and the subject matter of claims 19 and 20 into a different group. The focus of the claims of Group I is a polynucleotide encoding a human VDR isoform.

Claims 19 and 20 are directed to a nucleotide sequence which hybridizes to, i.e., is complementary to, the polynucleotide of claim 1. Applicants respectfully submit that a polynucleotide sequence and its complement should not be considered separate and distinct inventions. Clearly, the polynucleotides of the invention can exist as duplexes which include both the coding strand and the complementary non-coding strand. Again, contrary to the examiner's assertions, the subject matter of these two groups does have a common structural feature--they are constituent parts of the same molecule, whether associated or not. Applicants have emphasized this by the amendment set forth above to claim 1.

Accordingly, in view of the amendments and arguments set forth above, Applicants respectfully request that the subject matter of claims I, VI and VII all relate to polynucleotides comprising exon 1d sequences, and vectors, host cells and transgenic animals containing those sequences and should be examined together.

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| <input checked="" type="checkbox"/> Customer Number or Bar Code Label 6449 | | | | | |
| Name | Barbara G. Ernst, Reg. No. 30,377 | | | | |
| Signature | <i>Barbara G. Ernst</i> | | Date | Feb. 11, 2002 | |
| Address | Rothwell, Figg, Ernst & Manbeck Suite 701-East, 555 13th Street, N.W. | | | | |
| City | Washington | State | D.C. | Zip Code | 20004 |
| Country | U.S.A. | Telephone | 202-783-6040 | Fax | 202-783-6031 |

Attachment: Marked up copy of amendments

Marked Up Copy of Amended Claims:

Claim 1. An isolated polynucleotide molecule encoding a human Vitamin D receptor (hVDR) isoform, said polynucleotide molecule comprising a nucleotide sequence which includes ~~comprises~~ a sequence that substantially corresponds or is functionally equivalent to that of exon 1d of the human VDR gene ~~or a sequence complementary thereto.~~

Claim 10 (twice amended). A host cell transformed with a polynucleotide molecule according to claim 1 ~~or 5~~ or a plasmid or expression vector according to claim 9.

Claim 17 (twice amended). A non-human animal transformed with a polynucleotide molecule according to claim 1 ~~or 5~~.